



International students' information seeking behavior Report on an explorative case-study at RSLIS

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International students' information seeking behavior

Report on an explorative case-study at RSLIS



Summary

This report presents the first results and reflections from an exploratory case study carried out at The Royal School of Library and Information Science in 2015 on international students' information seeking behavior. A convenient sample of five international master students participated in the study, including a questionnaire and in-depth interviews. The focus was on international students' private and academic information needs and behavior 'abroad' in addition to their experiences of information seeking.

Based on the analysis of survey data and participants' descriptions of incidents associated with information seeking abroad five themes were identified for further examination and analysis: 1) the international student identity; 2) the influence from individual characteristics and experiences; 3) private and academic information seeking *during time*; 4) language barriers across private and academic life and 5) social networks and support for cultural adjustment. Insights into the characteristics of international students' information needs and behavior may help host institutions serve international students.

July, 2016

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Foreword

This report presents the first results and reflections from an exploratory case study carried out at the Royal School of Library and Information Science in 2015 on international students' information seeking behavior. The aim is to contribute to the understanding of international students' private and academic information needs and experiences. Five themes for further exploration and discussion have been identified. A number of questions are presented to initiate reflections on local practice and culture by host institutions including the international staff, academic management, administration, teachers and students.

A special thanks should be given to the five international master students in Information science and cultural communication who participated in the study.

Jette Hyldegård, Head of Study, July 2016.

Summary

In 2015, an explorative case study of international students was carried out at The Royal School of Library and Information Science (RSLIS) at the University of Copenhagen (UCPH). The aim was to investigate information seeking behavior and barriers among international students while being abroad. RSLIS has a strong tradition in hosting and teaching international students, implying an interest in qualifying students' experience abroad, e.g. by better insight into the information needs of this specific group of students.

A convenient sample of five international master students participated in the study during May through July 2015, including a questionnaire and an in-depth interview. The focus was on international students' private and academic information needs and use of information sources in addition to their perceptions and experiences of information seeking.

Based on the survey data and informants' descriptions of incidents and experiences related to private and academic needs abroad five themes were identified for further examination:

- 1) the international student identity
- 2) the influence from individual characteristics and experiences
- 3) private and academic information seeking *during time*
- 4) language barriers across private and academic life
- 5) social networks and support for cultural adjustment

Questions for further reflection

Understanding the characteristics of international students' information needs and behavior may help host institutions serve and support international students coping with private and academic life abroad.

In support of the international student, host institutions including international staff, management, administration, teachers and students should address the questions below to initiate reflections on their local practice and culture:

Academic management

- What mission is formulated regarding internationalization and mobility at the institution?
- Which visions and success criteria exist for the international program(s) at the host institution and which changes might be needed for program development, administration and staff?
- How is "the international classroom" supported due to changes in student composition, an increasing need for language skills as well as changing educational needs and pedagogy?

Academic staff

- What do you as teacher know about your international students, their background, learning experiences and expectations?
- What do the international students know about the course and the learning goals, your teaching approach and expectations of student engagement and participation in class?
- How do you approach the students when the class is mixed between native and international students – as members of an international class or as two different groups of students with separate needs and preferences?

Administrative staff

- Is it obvious that international students know about the local administrative procedures?
- Is it obvious that international students know about and understand governmental regulations?
- Is it obvious how the IT infrastructure is organized at the host institution and how the local systems and platforms relate to other systems at the institution?

International (student) coordinator

- Should the international (student) coordinator help international students overcoming barriers related to private information needs?
- How may international students benefit from activities and collaborations between the international (student) coordinator and the academic staff?

In future, the explorative study should be followed up by a larger and longitudinal study on international students' information behavior, including both full degree and exchange students.

Background and introduction

Over the past few years, an increased focus on internationalization of higher education has resulted in a range of changing conditions for the teaching and learning environments at the University of Copenhagen and Higher Education institutions in general. It has implied changes in the student composition of the international classroom requiring new skills and pedagogic approaches by the professors. The teacher perspective has recently been reflected in a booklet presenting teaching experiences with the international classroom by 13 professors across the University of Copenhagen (Reflections and teaching experiences from the international classroom, 2015). Each of the 13 stories give a good impression of the challenges associated with teaching a culturally heterogeneous group of students.

Turning to the international student, s(he) is often struggling with a number of challenges related to both private and academic life abroad, which also have been reflected in recent studies of international students' information seeking behavior (e.g. Catalano, 2013; Hamid & Bukhari, 2015; Sin, 2015; Sin & Kim, 2013; Sin et al., 2011; Song, 2005). According to Sin and Kim (2013), international students struggle with cross-cultural adjustment such as getting by in a non-native language, learning the social and cultural norms of the host country, establishing new relations and finding a residence. In addition to everyday life adjustment, international students also have to cope with the norms of the host institution including curriculum, teaching styles, rules and procedures. Language can also be a critical barrier to academic adjustment and learning. Moreover, international students are often required to cope with both the native language and English (known as the 'double language' barrier).

Sin and Kim (2013) call for a 'holistic' approach to international students by host institutions that acknowledges the existence of both private and academic needs.

Previous studies on international students' information seeking behavior have generally focused on host institutions from English native speaking countries or students of a specific nationality, whilst studies from European or Nordic institutions and countries have been lacking in the international research. Further, these studies have tended to focus on either private *or* academic information seeking behavior of international students.

To explore how private and academic information needs are perceived and experienced by international students enrolled in a Nordic university and how cultural adjustment may serve as a trigger for information seeking a pilot study was carried out in 2015 in a Danish university setting, that is, at the Royal School of

Library and Information Science (RSLIS). RSLIS is a department at the University of Copenhagen, Faculty of Humanities. The school has a strong international research and teaching reputation in information science. It offers a master program in Information Science and Cultural communication (with a specialization in Information Architecture and user studies) and courses in English targeted specifically exchange students. About 30 international students are enrolled every year. The courses are evaluated by the students every semester, but no evaluation exist of the international students' perception and experiences of their private and academic life while being enrolled at RSLIS.

The outcome of the pilot study will inform a larger study on international students' information seeking behavior and cultural adjustment in a Nordic context. The aim is to contribute with new insights into international students' needs and behavior for the benefit of future research and theory building on the one hand, and for the benefit of university officials, educators, student counsellors, information professionals and student associations serving international students on the other hand.

Methods

The pilot study was carried out between May and July 2015 at the Royal School of Library and Information Science (RSLIS). The focus was on international students' information needs and use and how they solve private and academic information needs to cope with life abroad. The case study method was framing the study including an analysis of a specific group (international students) in an explorative manner involving both quantitative and qualitative methods within a limited period of time (a snapshot). Further, the case was informed by local knowledge.

Participants

The participants were five international graduate students (a convenient sample) of information science and cultural communication (aged 18–34; 4 female, 1 male). All the participants were from Europe – a group often missing in studies of international students. When we recruited the participants, we invited only full degree students who are staying abroad for a two-year full master program. In the larger study, we will also invite exchange students staying for only one semester to look for behavior related to duration of stay. No Danish students were invited for comparison. The focus was on the *international student* and his/her experiences and perceptions in the role of being abroad. Thus, any comparison was made only from the perspective of the international student him or herself.

Procedures

The study was based on a qualitative approach employing a questionnaire (SurveyMonkey) in combination with an individual in-depth interview. The questionnaire was administered close to the interview and addressed: demographic, importance of private and academic information needs abroad, use and importance of information sources and channels as well as perceptions and experiences. Importance of information needs and sources was indicated with a number from 1 (least important) to 5 (most important). To collect data on perceptions and experiences respondents should state their agreement to eleven statements with a number from 1 (strongly disagree) to 5 (strongly agree) (Appendix 1). The statements concerned issues related to cultural adjustment, coping, information seeking and communication and were informed by findings from prior studies of international students. A local research group critically discussed the survey. Three of the respondents participated in a semi-structured interview (Appendix 2). Each interview lasted 1,5 hour and was recorded and transcribed for analysis. Before each

interview, the informant signed a consent of participation including whether data could be used for publication.

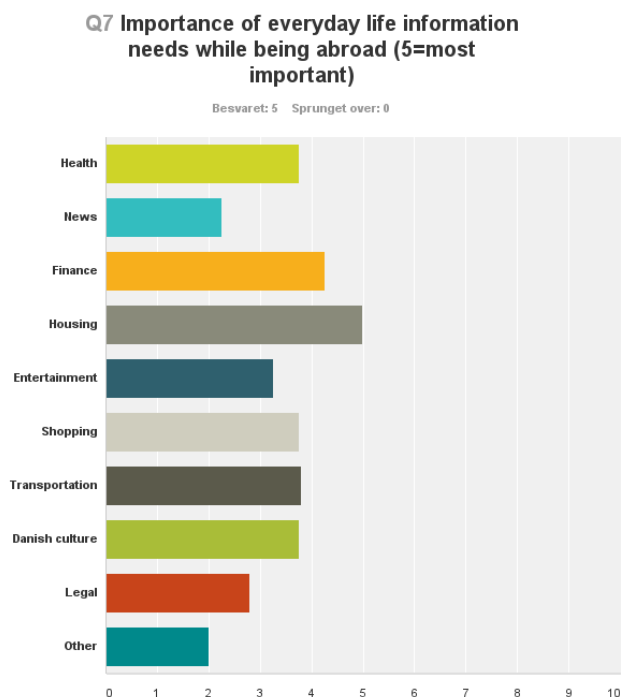
The survey data was analyzed statistically and used for the preparation of the interviews. Incident descriptions related to information needs and use as well as experiences were analyzed with the aim of identifying themes for further examination.

Results and outcome

The results from the explorative pilot study only give a snapshot of a minor group of international master students' information seeking behavior in relation to private and academic needs. The results are presented in three sections. Q-number in figures refers to the questionnaire. 'Respondents' refer to the survey data and 'informants' refer to the interview data, whereas 'participants' refer to the study in general.

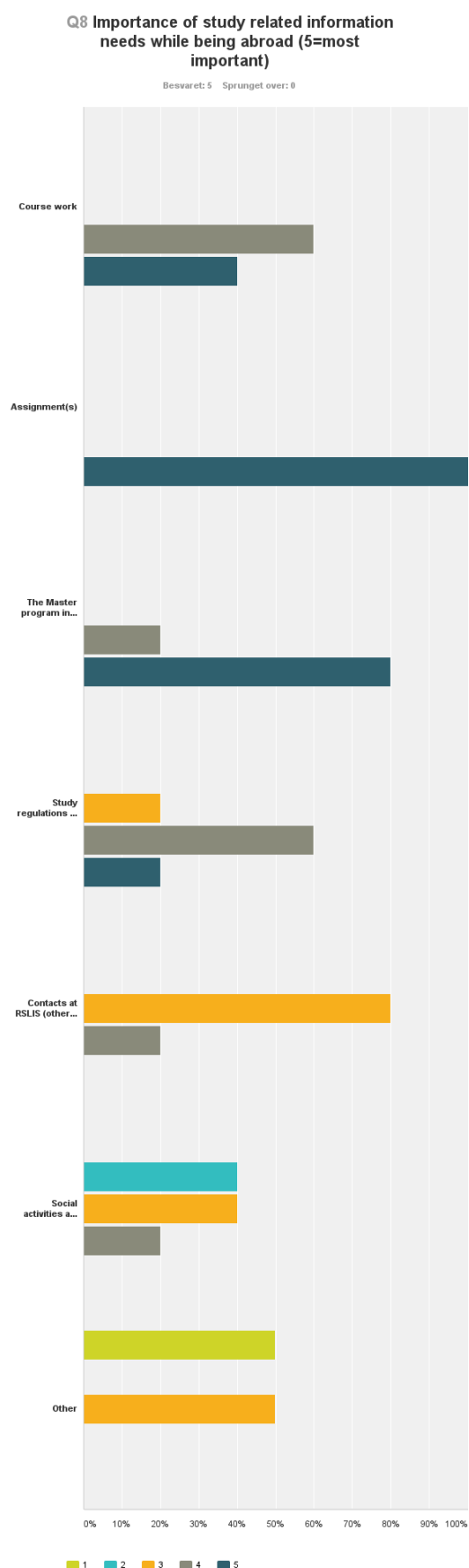
Characteristics of international students' information needs

Figure 1 and Figure 2 below show the respondents' perceived importance of private and academic needs.



Three areas of private information needs (out of ten) were pointed out as most important by most of the respondents (Figure 1): Housing (5,0), Finance (4,25) and Transportation (3,80). Also Shopping, Health and Danish culture were important (3,75). Among less important needs were Entertainment (3,33), Legal (2,5) and News (2,33).

Figure 1: Importance (average) of every day life information needs abroad. N=5.



When it came to academic needs four areas (out of seven) were pointed out as most important by most of the participants (Figure 2): Assignments (5,0), The master program including exams and courses (4,75), Course work (4,5) and Study regulations and procedures at RSLIS (4,0). Academic information needs tended to score higher on importance than private needs. The perceived experience of academic needs, however, tended to be less burdensome and stressful. One reason was that all information needed for the course and coursework was uploaded to the students on the learning platform by the professors. In relation to assignments students were required to find additional information themselves as part of the exam. A general search strategy among informants was to use the reference list of core papers, e.g. from the course. When information was needed on study regulations and exams the informants generally knew where to look up the information or whom to ask, e.g. the international student adviser or the professors. It was more difficult when it came to look up new courses for the next semester at the university and figure out the internal procedures and rules for assigning.

Figure 2: Importance (average) of academic needs abroad. N=5 (100%)

Use of information sources and channels

Participants' use of information sources and channels while being abroad are presented in Table 1, including frequency, purpose and importance of use.

Source / Channel	Frequency	Number	Purpose	Number	Importance/ average (1=low; 5=High)*
Google	Daily	5	Instrumental (to solve a problem) Leisure Contact to family and friends	3 1 1	4,5
Library (website)	Daily Weekly Monthly	2 2 1	Background information Coursework	1 4	4,5
E-Journals	Daily Weekly Monthly	1 3 1	Coursework Leisure Other	3 1 1	4,25
Library (physical)	Weekly Seldom	3 2	Background information Coursework Other	1 3 1	4,25
People (e.g. peers)	Daily Weekly Seldom	2 1 2	Instrumental (to solve a problem) Coursework Contact to family and friends	2 1 2	4,0
Social media	Daily Weekly	4 1	Leisure Update Contact to family and friends	3 1 1	4,0
Books	Weekly	5	Coursework Leisure	4 1	3,75
Databases	Daily Weekly Monthly Seldom	1 1 1 2	Instrumental (to solve a problem) Coursework Other	1 2 2	3,5
Wikipedia	Weekly	5	Background information Coursework	4 1	3,0
Other	Weekly	1	Contact to family and friends	1	-

Table 1: Use of information sources and channels

Google was used instrumentally on a daily basis for solving primarily private and social needs. Interestingly, the library website got the same importance score as Google.

Books and e-journals were used by most respondents for coursework on a weekly basis depending on the reading list of the course and the required exam. Visits to the library and search for additional information were only necessary in relation to assignments and was used for borrowing books and for studying. One informant stressed the value of having access to the library 24/7 – a service not offered at her home university. She had met with her study group in the library outside the official opening hours to discuss topics and relevant information seeking strategies.

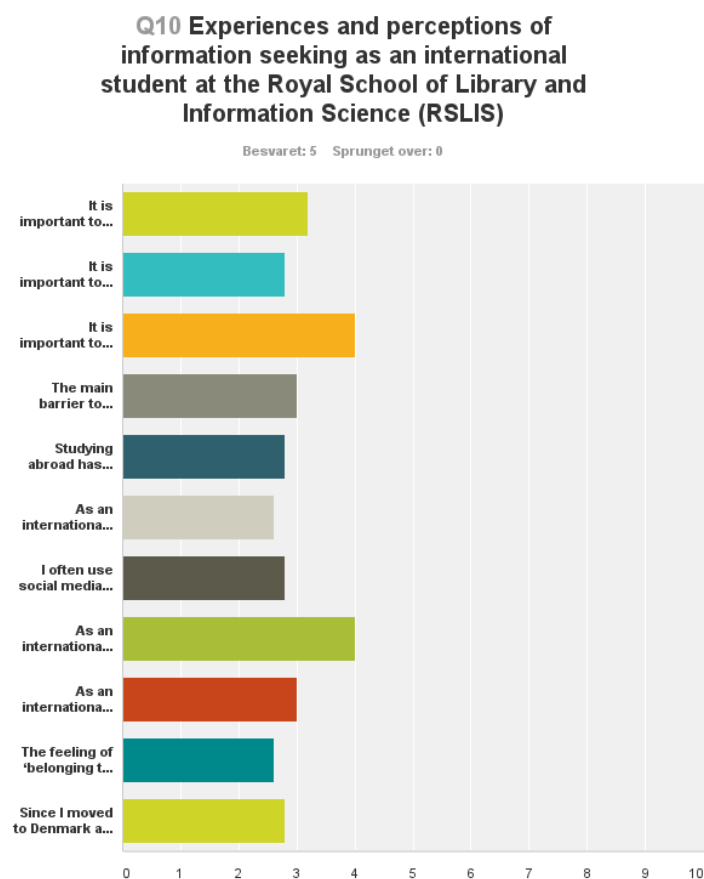
Social media were very important and used daily primarily for leisure, but also instrumentally for assignments to get an overview such as watching YouTube lectures and conference talks. Facebook was also pointed out by two informants as very important for social interaction and networking abroad. Viber and Skype were mentioned as 'other' sources used weekly for social needs. Though not frequently used by all participants, People (e.g. peers) were considered a very important information source.

Wikipedia was used weekly for finding background information, but not considered a critical source.

Participants' preferences for information sources and channels are consistent with other studies (e.g.; Sin & Kim, 2013; Sin et. al., 2011). For example, the Internet was used frequently to get access to information and

for communication. According to the informants, preferences for academic sources were influenced by the academic requirements of the program, but also by the informants' background and cultural norms from their home university.

International students' perceptions and experiences



Perceptions and experiences (Figure 3) differed across the group. Due to the low number of participants it is difficult to state whether this difference reflect a general tendency across international students, e.g. signifying that the *individual situation* of each international student matters. Statements may also have been difficult to grasp. The importance of social media and cultural adjustment were, however, emphasized by most participants.

Figure 3: Average scores of RSLIS international students' experiences and perceptions of information seeking abroad (1=strongly disagree; 5=strongly agree). N=5.

5 themes for further exploration

Based on the survey data and informants' descriptions of incidents and experiences related to private and academic needs abroad five themes have been identified for further examination.

1. The international student identity

Though Danish culture and welfare system seemed to be a 'trigger' for choosing to study in Denmark, the academic identity deriving from being an international student was essential to the informants. When first settled it became critical to adapt to the academic culture and norms of the host institution to establish a social network. The informants were very conscious that the international master program was part of a career plan. To one informant it was really important to be engaged in social or professional activities to strengthen her personal and professional network. Studying in Denmark was also motivated positively by the Scandinavian teaching approach including class discussions, student engagement and group work. Integration with the native (Danish) classmates that is considered a success criterion of the international classroom was only of little interest. The informants identified themselves more with other *international* students. The little interest in integration across international and native students has also been reported recently by Rienties & Nolan (2014). The students may perceive each other as two separate groups situated too differently to experience the need of integration. The lack of integration may also relate to lack of interest. In a study by Colvin & Volet (2014) 'cultural interest' was found to be one out of six influential dimensions of positive intercultural interaction. According to Brunton & Jeffrey (2014) there is a need to develop the intercultural communication competence of faculty and host students. In spite of the differences in perceptions and experiences of information seeking across the participants, international students seem to share characteristics that or a common international student identity.

2. The influence from individual characteristics and experiences

It turned out that all but one participant had prior experience of studying abroad and of exchange programs. According to two informants, this experience had influenced their choice of country, master program and university besides the recommendations from friends and professors. Prior experience in addition to informants' individual background situation and social network also seemed to influence their expectations and approach towards academic and private life in Denmark. To one informant, finance and how to make a living was very critical and completely affected her life abroad, including information seeking for cheap shopping places and health treatment. To another informant, friends with prior exchange experience from Denmark helped her cope with private information needs and problematic situations. The informants' cultural background and previous academic experience 'at home' also influenced their preferences for academic information sources abroad.

3. Private and academic information seeking *during time*

The perceived importance of information sources not only seemed to differ depending on individual situation, experiences and integration (social network), but also depending on *point of time*. At start, for example, seeking information and advice to find a place to live was the most critical and stressful need, but could be re-activated later on if they had to find or move to another place. Hence, importance of private information needs could change over time, but also across private and academic needs. In future, this intersection between private and academic information needs needs further exploration to understand the 'nature' of holistic adjustment *during time* and the implications for information seeking behavior.

4. Language barriers across private and academic life

Language appeared to be a challenge in both private and academic situations involving reading, writing, information seeking and learning. When seeking information from a Danish official website the English version generally did not contain the same detailed information or some pages could simply be in Danish only. In these cases, the informants managed by using Google Translate or by asking friends for help. Language barriers could also occur when officials were not able to serve informants sufficiently in English in relation to financial, legal, housing or health problems. Hence, part of the language barriers could also be related to skill limitations of the host country itself. This “reciprocal” language challenge brings new meaning to the concept of the ‘double language barrier’.

5. Social networks and support for cultural adjustment

The social dimension of international students’ behavior including contact to family and friends was very important to the participants in general. Their experience of increased use of social media abroad for private needs such as establishing a network, seeking social support and entertainment are in line with prior findings of international students (e.g. Forbush & Foucault-Welles, 2016; Hamid & Bukhari, 2015; Kim, Sohn & Choi, 2011; Sin & Kim, 2013). According to Forbush and Foucault-Welles (2016) social networks and support tend to have a reductive impact on acculturative stressors, hence lead to better adaption.

Conclusion

The pilot study has explored the characteristics of international students’ private and academic information needs and information seeking behavior abroad. Five themes for further exploration have been identified. In addition to more research on international students’ information seeking behavior in context, more attention is needed by host institutions to understand the implications of ‘holistic adjustment’ to international students. In future, this study should be followed up by a larger and *longitudinal* study on international students’ information seeking behavior.

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Appendix 1: Survey statements

Statements / Likert scale.

1. It is important to adjust to Danish culture and norms to succeed as international student
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree
2. It is important to integrate with Danish students to succeed as international student
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree
3. It is important to learn and understand the academic culture and norms at RSLIS (host institution) to succeed as international student
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree
4. The main barrier to succeed as international student at RSLIS is related to language (English and/or Danish)
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree
5. Studying abroad has changed my information seeking behavior
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree
6. As international student at RSLIS I use many new information sources
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree
7. I often use social media for information seeking in relation to course work (not only as International student)
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree
8. As international student I use social media more frequently (for course work and everyday life)
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree
9. As international student I experience new barriers to information seeking
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree
10. The feeling of 'belonging to RSLIS' as international student is more important than the feeling of 'belonging to Danish culture'
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree
11. Since I moved to Denmark and started as international student my contact to family and friends has changed
1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree

Appendix 2: Interview guide

Focus group interview, international students, June 2015, 1,5h.

[What, why, how, explain, examples, barriers, constraints, possibilities]

1. Demographics

All of you have been to DK before – just short, when and why? (vacation?)

Some of you have been studying abroad before – just short, what study and when?

Have this prior experience influenced your stay in DK and RSLIS in any way? How?

2. Characteristics of I-students' information seeking behavior (ELIS and Academic)

You seem to agree on **5 private needs** as most important: needs related to Health, Finance, Housing, shopping and transportation.

What kind of information needs do this more specifically cover?

Are they related to your present situation at RSLIS?

You seem to agree on **4 academic needs** as most important: needs related to Course work, Assignments, Information about the master program in information science and cultural communication (exams and modules) and information about study regulations.

Some of you mention contacts at RSLIS.

What kind of information needs do this more specifically cover?

Are they related to your present situation at RSLIS?

Information on social activities at the RSLIS do not seem to be that important – comments?

Let us turn to Information sources and channels

3. Information sources and channels

You all use Google on a daily basis, but not for course work. Does it mean that you never use Google for any academic need?

You never use social media for academic work, e.g. to ask peers about a problem or information, or look at a Youtube video of a lecture etc.

In which situations do you contact family or friends for information?

You seem to be using books more for course work than e-journals – preference?

You all use the library website for course work – in which way? What facilities do you use?

When do you visit the physical library, if any time?

Then we turn to the last issue – your perceptions in the role of being an international student.

4. Perceptions and reflections

[Uddele kort]

Please write the first thing that you think of when identifying yourself with being an international student in DK and/or at RSLIS.

[Present statements from the survey (disagreements in group)].

Why or Why not - Comments – opinions, reflections, arguments...

“It is important to adjust to Danish culture and norms to succeed as international student”

“It is important to integrate with Danish students to succeed as international student”

“It is important to learn and understand the academic culture and norms at RSLIS (host institution)”

“The main barrier to succeed as international student at RSLIS is related to language (English and/or Danish)”

“As international student I use social media more frequently (for course work and everyday life)”

“The feeling of ‘belonging to RSLIS’ as international student is more important than the feeling of

“belonging to Danish culture”

➔ Debriefing